

# ESG Data Book

## Mass Balance Table for the Group (FY2022)

INPUT	
<b>Raw Materials</b> ✓	<b>Energy</b> ✓
<b>Primary raw materials</b>	<b>Fuel</b>
Domestic operating sites 1,597 kt	Domestic operating sites 2,604 TJ
Overseas operating sites 15 kt	Overseas operating sites 2,263 TJ
<b>Total 1,611 kt</b>	<b>Total 4,867 TJ</b>
<b>Recycled raw materials</b>	<b>Electricity and heat*</b>
Domestic operating sites 222 kt	Domestic operating sites 4,727 TJ
Overseas operating sites 11 kt	Overseas operating sites 3,563 TJ
<b>Total 233 kt</b>	<b>Total 8,289 TJ</b>
<b>Water Resources</b> ✓	<b>Fresh water</b>
	Domestic operating sites 17.4 million cubic meters
	Overseas operating sites 10.2 million cubic meters
	<b>Total 27.6 million cubic meters</b>
	<b>Seawater</b>
	Domestic operating sites 37.3 million cubic meters
	Overseas operating sites — million cubic meters
	<b>Total 37.3 million cubic meters</b>

### JX Metals Group

\* Includes thermal energy (consuming steam, hot water, and cold water) supplied by third parties

OUTPUT	
<b>Principal Products</b> ✓	<b>Emissions</b>
Copper concentrate 329 kt	<b>CO<sub>2</sub></b> ✓
Electrolytic copper 427 kt	Total of domestic operating sites
Gold 41 t	Scope 1 386 kt
Silver 334 t	Scope 2 193 kt
Platinum 629 kg	Total of overseas operating sites
Palladium 2,631 kg	Scope 1 152 kt
Other metals (selenium, tellurium) 311 t	Scope 2 66 kt
Electro-deposited and rolled copper foil 8 kt	<b>Total 797 kt</b>
Copper alloy, special steel strips, etc. 26 kt	<b>Sulphur oxides</b> ✓
Titanium sponge 22 kt	Domestic operating sites 4.5 kt
Sulfuric acid (by-product) 1,208 kt	Overseas operating sites 0.0 kt
	<b>Total 4.5 kt</b>
	<b>Nitrogen oxides</b> ✓
	Domestic operating sites 0.3 kt
	Overseas operating sites 0.0 kt
	<b>Total 0.3 kt</b>
	<b>Final disposal of waste materials</b> ✓
	Domestic operating sites 53.8 million cubic meters
	Overseas operating sites 1.1 million cubic meters
	<b>Total 54.9 million cubic meters</b>
	<b>Wastewater</b> ✓
	Domestic operating sites 53.8 million cubic meters
	Overseas operating sites 1.1 million cubic meters
	<b>Total 54.9 million cubic meters</b>
	<b>Chemical substances (release and transfer)</b> ✓
	Total of domestic operating sites 0.39 kt

## Environmental Management

Operating Sites That Have Obtained ISO 14001 Certification (as of March 31, 2023)

Domestic Operating Sites: 27	Overseas Operating Sites: 16
Hitachi Works of JX Metals Corporation (including Technology Development Center, Hitachi Works of JX Metals Smelting Co., Ltd., and JX Metals Environmental Services Co., Ltd.)	JX Nippon Mining & Metals Philippines, Inc.
Copper Foil Dept. of JX Metals Corporation (including Hitachi Office of JX Nippon Foundry Co., Ltd. and Ichinoseki Foil Manufacturing Co., Ltd.)	JX Metals USA, Inc.
Isohara Works of JX Metals Corporation	Materials Service Complex Malaysia Sdn. Bhd.
Kurami Works of JX Metals Corporation (including JX Nippon Coil Center Co., Ltd. and the Kurami Office of JX Metals Trading Co., Ltd.)	JX Metals Korea Co., Ltd.
Saganoseki Smelter & Refinery of JX Metals Smelting Co., Ltd. (including Japan Copper Casting Co., Ltd., and JX Metals Smelting Logitech Co., Ltd.)	Nikko Fuji Precision (Wuxi) Co., Ltd.
JX Metals Tomakomai Chemical Co., Ltd.	Longtan Works of Nikko Metals Taiwan Co., Ltd.
JX Metals Mikkaichi Recycle Co., Ltd.	Nippon Mining & Metals (Suzhou) Co., Ltd.
Chigasaki Plant of Toho Titanium Co., Ltd. (including its Kurobe Plant and Wakamatsu Plant and Toho Technical Service Co., Ltd.)	JX Nippon Mining & Metals Dongguan Co., Ltd.
Esashi Works, Nasu Works, and Kakegawa Works of JX Metals Precision Technology Co., Ltd.	TANIOBIS GmbH (including TANIOBIS Smelting GmbH & Co. KG, TANIOBIS Co., Ltd., and TANIOBIS Japan Co., Ltd.)
Amagasaki Office of JX Metals Trading Co., Ltd. (including Takatsuki Plant)	Valleyfield, Mississauga, Airdrie, and Chilliwack of eCycle Solutions, Inc.
Shirakawa Plant of JX Metals Takasho Co., Ltd.	
Tsukuba Factory of Furuuchi Chemical Corporation	

## Raw Materials

Ratio of Recycled Raw Materials (FY2022)

Ratio of recycled raw materials in incoming raw materials for the copper smelting business

**14.9%** ✓

Ratio of copper from recycled raw materials in electrolytic copper

**24.8%** ✓

Definition of Recycled Raw Materials

(1) Ratio of recycled raw materials in incoming raw materials for the copper smelting business

(total dry volume of recycled raw materials processed at JX Metals Smelting Co., Ltd.\*1) ÷ (total dry volume of primary and recycled raw materials processed at JX Metals Smelting Co., Ltd.) x 100 (Unit: %)

\*1 However, the dry volume of recycled raw materials before pretreatment is calculated based on the pretreatment residue ratio if recycled raw materials are pretreated at JX Metals plants or affiliates, other than JX Metals Smelting Co., Ltd. and the dry volume of recycled raw materials before pretreatment is available.

(2) Ratio of copper from recycled raw materials in electrolytic copper

(amount of copper derived from recycled raw materials in copper anodes per year\*2) ÷ (copper anode charge per year)

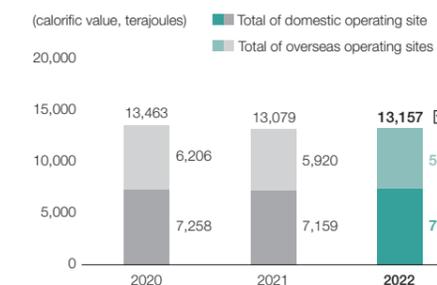
\*2 Cumulative 12-month total of figures calculated monthly with (monthly copper anode charge in the electrorefining process at JX Metals Smelting Co., Ltd.) x (ratio of copper from recycled raw materials in copper anode\*3).

\*3 (Total amount of copper in recycled raw materials processed by JX Metals Smelting Co., Ltd. for the month) x (copper yield at Saganoseki Smelter & Refinery for the month) ÷ (total copper in net copper production at Saganoseki Smelter & Refinery for the month)

\*4 In the electrorefining process, copper anodes are electrolyzed to produce electrolytic copper. Here, there is no input of copper components other than copper anodes. Therefore, the recycling ratio in copper anodes charged in the process is equal to the recycling ratio in electrolytic copper.

## Energy

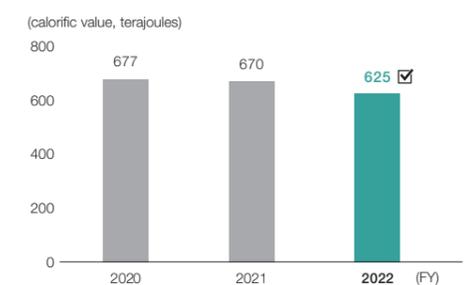
Energy Consumption



\* Energy consumption is calculated by applying the calorific value conversion coefficients for fuel and electricity as stipulated in the Act on Rationalizing Energy Use (currently, the Act on Rationalizing Energy Use and Shifting to Non-fossil Energy)

\* We revised calorific value conversion coefficients applied to electricity consumption, retroactively revising figures to fiscal 2020. (3.6 MJ/kWh is applied for electricity consumption)

Energy Consumption in Logistics Stages (Domestic)



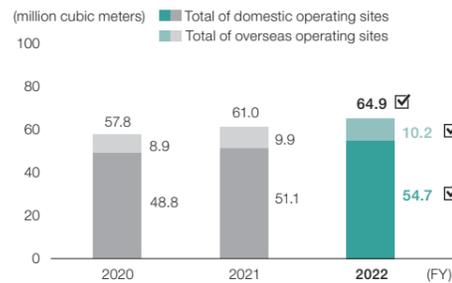
\*Applicable to specified consigners as defined in the Act on Rationalizing Energy Use. Four Group companies fall under this definition: JX Metals Corporation, JX Metals Smelting Co., Ltd., Kasuga Mines Co., Ltd., and Pan Pacific Copper Co., Ltd.

Breakdown by Fuel Type

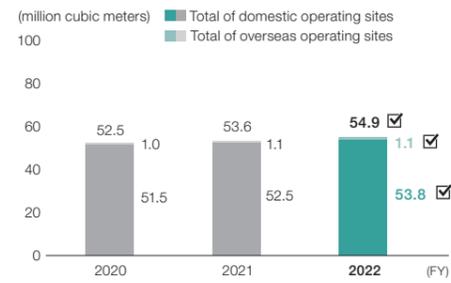
	Domestic Operating Sites	Overseas Operating Sites
Kerosene (kL)	127	0
Gasoline (kL)	130	153
Light oil (kL)	2,940	55,260
Class A heavy oil (kL)	7,895	0
Class B and C heavy oil (kL)	14,847	0
Reclaimed oil (kL)	2,664	0
LPG/Butane (t)	5,657	40
LNG (t)	3,880	683
Coke (t)	1,311	0
Petroleum coke (t)	4,326	0
City gas (thousand cubic meters)	17,291	3,018

Water Resources

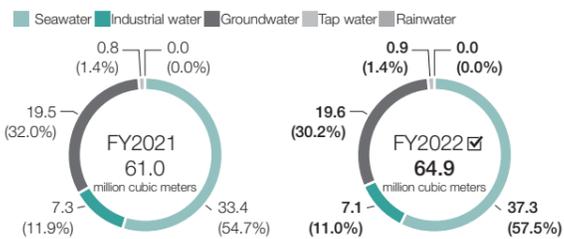
Water Usage\*1



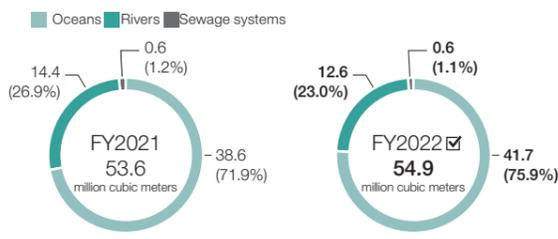
Water Discharge\*2



Total Water Usage\*1



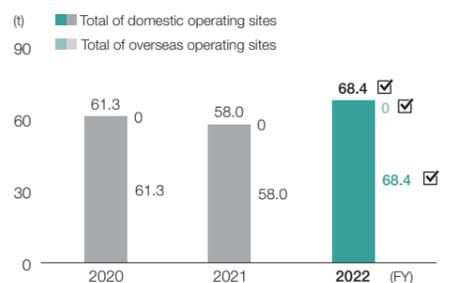
Total Water Discharge\*2



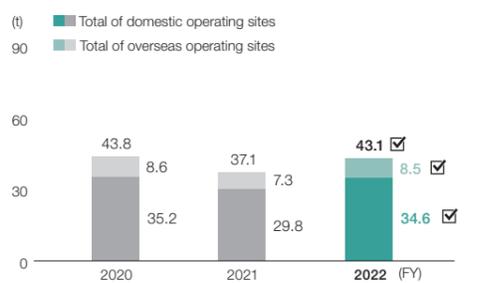
\*1 Seawater usage at the Saganoseki Smelter & Refinery of JX Metals Smelting Co., Ltd. is calculated based on pumping capacity. Freshwater usage at the Saganoseki Smelter & Refinery of JX Metals Smelting Co., Ltd. and water usage at other operating sites are based on flowmeter readings or on invoices from the site's respective water utility.  
 \*2 The volume of water discharged into public waters (oceans and rivers) at each operating site represents the following: an amount calculated based on drainage weirs (Hitachi Works, Isohara Works, JX Metals Tomakomai Chemical Co., Ltd., and JX Metals Mikkaichi Recycle Co., Ltd.); an amount obtained by multiplying groundwater usage by a fixed rate (Kurami Works, Toho Titanium Co., Ltd.'s Chigasaki Plant); an amount from invoices (Toho Titanium Co., Ltd.'s Yahata Plant and Kurobe Plant); or an amount based on flowmeter readings (other operating sites). The volume of water discharged into the sewage system at each operating site represents the following: an amount calculated based on daily water discharge (TANIJOBIS Co., Ltd.); or an amount based on flowmeter readings or on invoices from the site's respective sewage utility for other operating sites.

Water Pollutants

COD Load



BOD Load

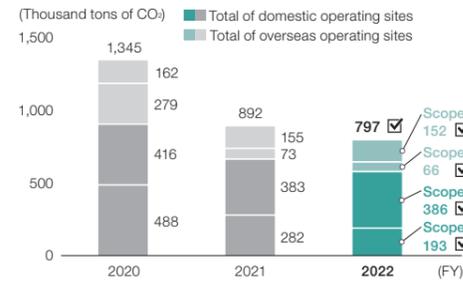


\* Totals are for operating sites subject to legal requirements (sites that discharge water into oceans).

\* Totals are for operating sites subject to legal requirements (sites that discharge water into rivers or streams).

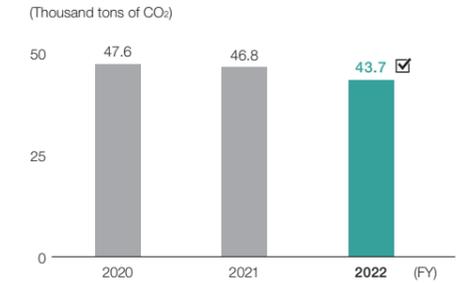
Climate Change

CO<sub>2</sub> Emissions From the Entire JX NMM Group (Scope 1 & 2)



\* Scope 1 emissions are those from energy consumption (fuel), emissions from incineration of waste materials (waste oil, waste plastic, sludge, waste wood), and emissions from reducing agents, neutralizing agents, graphite electrodes, and recycled materials, converted to equivalent CO<sub>2</sub>.  
 \* Scope 2 emissions are those from electricity or heat consumption converted to equivalent CO<sub>2</sub>. This figure includes emissions from thermal energy (consuming steam, hot water, and cold water) supplied by third parties. The emission factors applied for Scope 2 calculation are as follows for domestic and overseas Group operating sites, respectively.  
 Domestic: The latest adjusted emission factors per electric power utility published by the Ministry of the Environment and the Ministry of Economy, Trade and Industry are applied.  
 Overseas: Emission factors published by local power companies, national governments, or country-specific emission factors published in the IEA Emission Factors 2022, issued by the International Energy Agency (IEA), are applied.

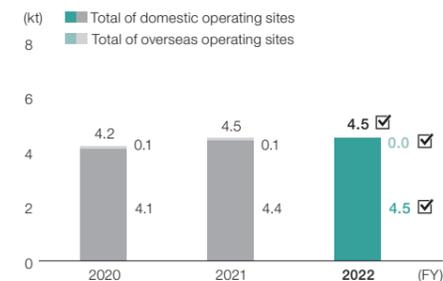
CO<sub>2</sub> Emissions in Logistics Stages



\* Applicable to specified consigners as defined in the Act on Rationalizing Energy Use. Four Group companies fall under this definition: JX Metals Corporation, JX Metals Smelting Co., Ltd., Kasuga Mines Co., Ltd., and Pan Pacific Copper Co., Ltd.

Air Pollutants

SO<sub>x</sub> Emissions



\* Totals are for operating sites subject to emissions regulations.

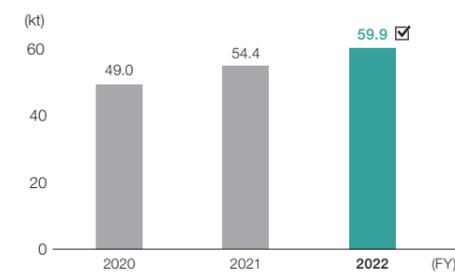
NO<sub>x</sub> Emissions



\* Totals are for operating sites subject to emissions regulations.

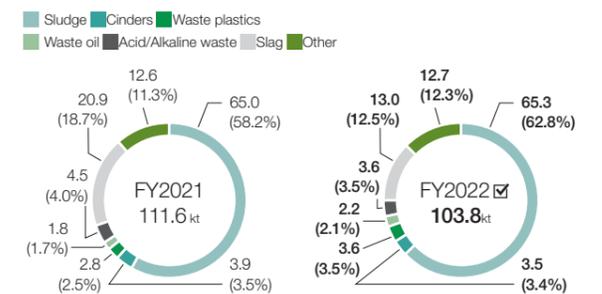
Waste Materials and By-Products

Volume of Final Disposal of Waste

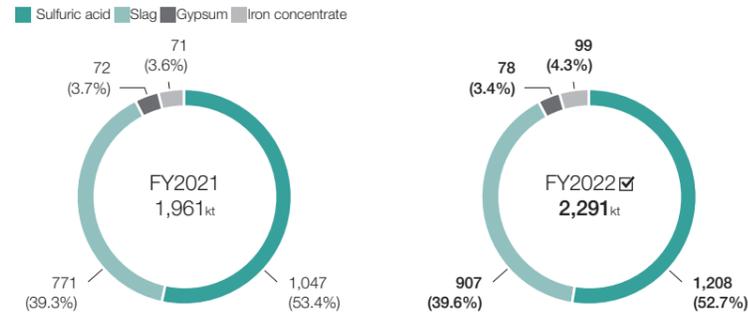


\* These do not include the approximately 26.2 million tons of slag from the Case-rones Copper Mine.  
 \* Calculations include the final disposal volumes of Toho Titanium Co., Ltd.'s offshore landfill volume and the TANIJOBIS Group.

Total Discharge Volume by Type of Waste Materials

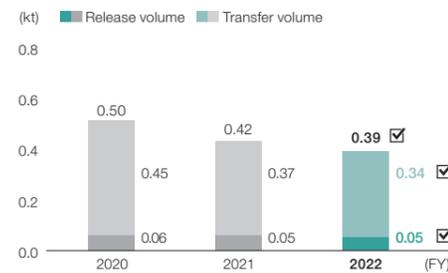


By-Product Production



Chemical Substances

Volumes of Release and Transfer of PRTR Substances



Breakdown of Release Volumes of PRTR Substances



Volumes of Release and Transfer of Major PRTR Substances in FY2022

No.	Cabinet Order No.	Chemical Substance	Release Volume			Transfer Volume	
			Air	Water	On-Site Landfill Disposal	Sewage Systems	Waste Materials
1	31	Antimony and its compounds	0.1	0.6	0.0	0.0	6.5
2	75	Cadmium and its compounds	0.1	0.1	0.0	0.0	13.4
3	132	Cobalt and its compounds	0.0	0.2	0.0	0.0	9.1
4	272	Copper salts (water soluble)	0.3	1.6	0.0	0.0	7.0
5	300	Toluene	35.1	0.0	0.0	0.2	235.0
6	305	Lead compounds	0.8	0.1	0.0	0.0	47.8
7	309	Nickel compounds	0.1	0.4	0.0	0.0	8.9
8	405	Boron compounds	0.0	5.4	0.0	0.0	1.5
9	243	Dioxins	0.1	0.0	0.0	0.0	2.9

The values given are the total amount reported by operating sites subject to reporting requirements under the PRTR Act (the domestic companies defined in Scope of this Report on page 4 as subject to Environment section reporting). Of the 49 chemical substances subject to reporting, those totaling at least 5.0 tons in any category, and dioxins, are listed here. There were no cases of chemical substances released into the soil.

Occupational Health and Safety

Occupational and Other Accidents\*1, \*2

Category		2020	2021	2022		
Safety performance at domestic operating sites	Employees (including Group companies)	Fatalities (persons)*3	0	0	0	
		Occupational accidents with severe consequences (persons)*3	0	0	0	
		Accidents with lost work days (persons)*3	7	10	3	
		Accidents without lost work days (persons)*3	13	24	27	
		Total (persons)	20	34	30	
	Major types of occupational accidents*4	Strain or overexertion (persons)	5	6	2	
		Falls on same level (persons)	1	3	4	
		Caught in, on, or between machinery (persons)	3	1	7	
	Frequency rate of occupational accidents*5	Fatalities*3	0.00	0.00	0.00	
		Occupational accidents with severe consequences*3	0.00	0.00	0.00	
	Severity rate of occupational accidents*5		0.03	0.03	0.01	
	Cumulative work hours*5		13,290,060	13,442,362	14,365,459	
	Employees of subcontractors*6	Casualties of occupational accidents*4	Fatalities (persons)	2	0	0
			Occupational accidents with severe consequences (persons)	0	0	0
			Accidents with lost work days (persons)	2	6	4
Accidents without lost work days (persons)			6	13	13	
Total (persons)			10	19	17	
Major types of occupational accidents*4		Cut or abrasions (persons)	4	4	1	
		Crashes or falls to lower level (persons)	2	2	2	
		Struck by object (persons)	0	0	1	
Frequency rate of occupational accidents*5,6		Fatalities*3	0.64	0.00	0	
		Occupational accidents with severe consequences*3	0.00	0.00	0	
		Accidents with lost work days*3	0.64	1.94	1.47	
Severity rate of occupational accidents*5,6		4.82	0.11	0.04		
Cumulative work hours*6		3,117,548	3,090,280	2,726,924		
Total casualties (persons)		30	53	47		
Occupational injury rate per 1,000 employees (four or more lost workdays)*7		1.1	1.7	0.74		
Explosions and fires (incidences)*8		1	0	2		
(Reference) Safety performance at overseas operating sites*9	Fatalities (persons)	0	0	0		
	Accidents with lost work days (persons)	13	19	17		
	Accidents without lost work days (persons)	5	7	5		
	Total (persons)	18	26	22		
	Major types of occupational accidents	Caught in, on, or between machinery (persons)	3	8	3	
		Falls on same level (persons)	5	4	1	
		Strain or overexertion (persons)	3	3	1	

\*1 Safety performance data is compiled on a calendar year basis (January to December).  
 \*2 The number of casualties presented in this table includes work-related illnesses such as back pain and heat stroke.  
 \*3 Each accident category is defined as follows.  
 • Fatalities: Worker deaths resulting from work-related causes.  
 • Occupational accidents with severe consequences: Accidents resulting in more than six months of lost work days or a disability grade.  
 • Accidents with lost work days: Accidents requiring one or more days of absence from work for the purpose of examination, treatment or recuperation. These shall in principle be at a physician's discretion. Note that this excludes "Occupational accidents with severe consequences."  
 • Accidents without lost work days: An accident that does not require one full day or more of absence from work as diagnosed by a physician, and in which the affected worker is able to go to work after the accident.  
 \*4 Incidences related to the cause of the injury or illness, based on "Types of Accidents," published by the Ministry of Health, Labour and Welfare.  
 \*5 Both the frequency rate (the number of persons harmed or killed due to occupational accidents per million cumulative actual work hours) and the severity rate (number of work days lost per thousand cumulative actual work hours) cover Company employees and employees at other Group companies (including Toho Titanium).  
 \*6 Safety statistics for subcontractor employees include not only those stationed permanently but also spot vendors. Note that these are subject to statistics for frequency rate and severity rate as of 2020. Cumulative work hours are calculated as follows: Number of permanently stationed subcontractor employees at the end of each month x number of operating days x 8 hours/day.  
 (Reference) In 2022, the frequency and severity rate of occupational accidents for all businesses in Japan were 2.06 and 0.09, respectively (Source: Ministry of Health, Labour and Welfare, "Survey on Industrial Accidents")  
 \*7 The Group defines a serious accident as one that results in four or more lost work days, and considers the occupational injury rate per 1,000 employees to be one of our key indicators for evaluation.  
 (Occupational injury rate per 1,000 employees (four or more lost workdays) = number of casualties with four or more lost workdays ÷ total number of employees (including employees of regular partner companies) x 1,000)  
 \*8 No physical injuries were caused as a result of explosions/fires.  
 \*9 While this includes Group companies and subcontractors, this data should be used only for reference as it is difficult to conduct follow-up surveys and aggregate working hours for subcontractors at overseas operating sites, and detailed data such as frequency rates are not disclosed.

## Human Resource Development

### Training Programs Implemented in FY2022

	Managerial Staff			Non-Management Employees			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Total annual program hours (hours)	9,486	379	9,865	62,507	11,530	74,036	71,993	11,909	83,902
Program hours per employee (hours/person)	22	9	21	57	24	47	47	23	41

\* Survey scope: Employees of JX Metals plus those seconded by the Company to JX Metals Environmental Services Co., Ltd. and JX Metals Smelting Co., Ltd. (Saganoseki Smelter & Refinery, Hitachi Works)

## Employment and Work Styles

Survey scope: Companies in which JX Metals has 50% or more of their voting rights, directly or indirectly  
 Treatment of seconded employees: Employees seconded from companies outside of survey scope to companies inside of survey scope are counted. Employees seconded from companies inside of survey scope to companies outside of survey scope are also counted.

### No. of Employees (by Employment Status and Employment Contract Type; as of March 31, 2023)

Employment Status	Contract Type	Male	Female	Total
Full-time	Contracts without fixed terms	8,449	1,383	9,832
	Contracts with fixed terms	634	133	767
Full-time subtotal		9,083	1,516	10,599
Part-time	Contracts without fixed terms	31	47	78
	Contracts with fixed terms	58	24	82
Part-time subtotal		89	71	160
Total		9,172	1,587	10,759

(persons)

Employment Status	Contract Type	Japan	North America	South America	Asia	Europe	Middle East	Total
Full-time	Contracts without fixed terms	6,763	371	949	1,389	350	10	9,832
	Contracts with fixed terms	567	1	93	70	36	0	767
Full-time subtotal		7,330	372	1,042	1,459	386	10	10,599
Part-time	Contracts without fixed terms	56	0	0	3	19	0	78
	Contracts with fixed terms	79	0	0	1	2	0	82
Part-time subtotal		135	0	0	4	21	0	160
Total		7,465	372	1,042	1,463	407	10	10,759

### No. of Employees (by Region; as of March 31, 2023)

(persons)

	Japan	North America	South America	Asia	Europe	Middle East	Total
Male	6,575	270	947	1,033	337	10	9,172
Female	890	102	95	430	70	0	1,587
Total	7,465	372	1,042	1,463	407	10	10,759

### No. of Newly Hired Employees (April 1, 2022 to March 31, 2023)

(persons)

	Male	Female	Total
No. of new hires	880	181	1,061
Percent of total employee count as of March 31, 2023	10%	11%	10%

(persons)

	Age 29 or Younger	Age 30 to 49	Age 50 or Older	Total
	408	520	133	1,061
	26%	8%	5%	10%

(persons)

	Japan	North America	South America	Asia	Europe	Middle East	Total
No. of new hires	672	100	206	71	12	0	1,061
Percent of total employee count as of March 31, 2023	9%	27%	20%	5%	3%	0%	10%

### No. of Employees Ending Employment (April 1, 2022 to March 31, 2023)

(persons)

	Male	Female	Total
No. of retiring employees	575	129	704
Percent of total employee count as of March 31, 2023	6%	8%	7%

(persons)

	Age 29 or Younger	Age 30 to 49	Age 50 or Older	Total
	178	326	200	704
	11%	5%	7%	7%

(persons)

	Japan	North America	South America	Asia	Europe	Middle East	Total
No. of retiring employees	276	135	151	128	14	0	704
Percent of total employee count as of March 31, 2023	4%	36%	14%	9%	3%	0%	7%

\* Employees retiring at the mandatory retirement age are not in scope.

### Membership in Labor Unions (as of March 31, 2023)

(persons)

	Male	Female	Total
No. of union members	5,690	889	6,579
Unionization rate	62%	56%	61%

(persons)

	Age 29 or Younger	Age 30 to 49	Age 50 or Older	Total
	1,212	4,045	1,322	6,579
	76%	64%	46%	61%

## Diversity

### Use of Childcare Leave in FY2022 (JX Metals)

	(persons)		
	Male	Female	Total
No. of employees using leave	22	10	32
No. of employees eligible to use leave*	122	10	132
Percentage	18%	100%	24%

\* Male: Employees with a child born within the fiscal year  
 Female: Employees whose post-childbirth leave ended during the fiscal year and who can take childcare leave

### Retention Rate After Childcare Leave (Percentage of Those Still Employed 12 Months After Returning From Leave) (JX Metals)

	(persons)		
	Male	Female	Total
No. of employees who returned to work from childcare leave during FY2021	17	12	29
No. of employees still employed 12 months after returning to work	15	12	27
Percentage	88%	100%	93%

### Rate of Return to Work After Childcare Leave (JX Metals)

	(persons)		
	Male	Female	Total
No. of employees who returned to work from childcare leave during FY2022	22	16	38
No. of employees scheduled to return to work	22	16	38
Percentage	100%	100%	100%

### Status of Rehiring Efforts in FY2022 (JX Metals)

	(persons)
No. of age-limited retirees	62
No. of these rehired	54
Percentage	87%

### Persons With Disabilities as a Percentage of the Workforce in FY2022 (JX Metals)

Percentage of employees with disabilities (statutory minimum: 2.3%)	2.10%
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### No. of Locally Hired Senior Managers Overseas (Section Manager or Above) and Locally Hired Employees (as of March 31, 2023)

		(persons)		
		Number of Senior Managers	Senior Managers as a Share of Locally Hired Employees* <sup>1</sup>	Number of Locally Hired Employees* <sup>2</sup>
North America	Male	40	15%	270
	Female	7	7%	102
North America subtotal		47	13%	372
South America	Male	65	7%	947
	Female	6	6%	95
South America subtotal		71	7%	1,042
Europe	Male	51	15%	337
	Female	8	11%	70
Europe subtotal		59	14%	407
Asia	Male	149	14%	1,033
	Female	67	16%	430
Asia subtotal		216	15%	1,463
Total		393	12%	3,284

Scope of aggregation: Overseas Group companies in which JX Metals has 50% or more of their voting rights, directly or indirectly.  
 Treatment of seconded employees: Employees seconded from companies outside of survey scope to companies inside of survey scope are counted.  
 Employees seconded from companies inside of survey scope to companies outside of survey scope are also counted.

\*1 Percentage calculated as (Number of senior managers ÷ Number of locally hired employees) × 100

\*2 The number of employees directly employed by overseas subsidiaries, excluding employees on secondment and employees transferred to overseas subsidiaries

## Independent Assurance Report

To the President & Representative Director of JX Metals Corporation

We were engaged by JX Metals Corporation (the "Company") to undertake a limited assurance engagement of the environmental and social performance indicators marked with  (the "Indicators") for the period from April 1, 2022 to March 31, 2023 included in its Sustainability Report 2023 (the "Report") for the fiscal year ended March 31, 2023.

### The Company's Responsibility

The Company is responsible for the preparation of the Indicators in accordance with its own reporting criteria (the "Company's reporting criteria"), as described in the Report.

### Our Responsibility

Our responsibility is to express a limited assurance conclusion on the Indicators based on the procedures we have performed. We conducted our engagement in accordance with the 'International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements other than Audits or Reviews of Historical Financial Information' and the 'ISAE 3410, Assurance Engagements on Greenhouse Gas Statements' issued by the International Auditing and Assurance Standards Board. The limited assurance engagement consisted of making inquiries, primarily of persons responsible for the preparation of information presented in the Report, and applying analytical and other procedures, and the procedures performed vary in nature from, and are less in extent than for, a reasonable assurance engagement. The level of assurance provided is thus not as high as that provided by a reasonable assurance engagement. Our assurance procedures included:

- Interviewing the Company's responsible personnel to obtain an understanding of its policy for preparing the Report and reviewing the Company's reporting criteria.
- Inquiring about the design of the systems and methods used to collect and process the Indicators.
- Performing analytical procedures on the Indicators.
- Examining, on a test basis, evidence supporting the generation, aggregation and reporting of the Indicators in conformity with the Company's reporting criteria, and recalculating the Indicators.
- Visiting the Company's Kurami Works and making inquiries and reviewing materials including documented evidence of the Saganoseki Smelter & Refinery of JX Metals Smelting Co., Ltd. as alternative procedures to a site visit, selected on the basis of a risk analysis.
- Evaluating the overall presentation of the Indicators.

### Conclusion

Based on the procedures performed, as described above, nothing has come to our attention that causes us to believe that the Indicators in the Report are not prepared, in all material respects, in accordance with the Company's reporting criteria as described in the Report.

### Our Independence and Quality Management

We have complied with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which includes independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior. In accordance with International Standard on Quality Management 1, we design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

/s/ Kazuhiko Saito

Kazuhiko Saito, Partner, Representative Director

KPMG AZSA Sustainability Co., Ltd.

Tokyo, Japan

February 9, 2024

Notes to the Reader of Independent Assurance Report:

This is a copy of the Independent Assurance Report and the original copies are kept separately by the Company and KPMG AZSA Sustainability Co., Ltd.